Relative Deprivation and Relative Gratification as Predictors of Intergroup Discrimination:
Can Prejudice be Reduced by Equality?

by
Bridgitte Neuwenhuis

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Supervisor: Prof. Kitty Dumont

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ABSTRACT

It has long been identified that relative deprivation increases prejudice. Guimond and Dambrun (2002) demonstrated that relative gratification, as the opposite of relative deprivation, is also an important variable in predicting intergroup discrimination. Guimond and Dambrun (2002), further suggest that in order to prevent destructive conflicts between groups, such as intergroup discrimination, the goal of equality rather than economic improvements has to be kept in mind. The present paper will report three experiments which aimed to replicate Guimond and Dambrun’s (2002) findings on relative deprivation and relative gratification and which further aimed to test their proposal that equality would reduce prejudice. The results of the three experiments confirmed the predicted effects of relative deprivation and relative gratification on intergroup discrimination. However, the results did not confirm that equality reduces prejudice. Methodological and theoretical reasons for these results are provided and discussed in detail.
INTRODUCTION

“A house may be large or small; as long as the surrounding houses are equally small, it satisfies all social demands for a dwelling. But let a palace arise beside the little house, and it shrinks from a little house into a hut” (Marx, as cited in Myers, 1996, p. 446).

Relative Deprivation Theory (RD) has been prominent for over 50 years and has been useful in Psychology, Sociology and the Social and Political Sciences to explain social conflicts (Walker & Smith, 2002). Relative Deprivation is commonly defined as the perception that one is less well off than another to whom one compares oneself (Myers, 1996, p. 446), or where a group experiences a perceived deprivation in comparison to some relevant outgroup (Guimond & Dumbrun, 2002). The latter has been shown to cause intergroup discrimination. Relative gratification (RG) as a positive comparison outcome and thus the opposite of relative deprivation, however, did not attract much interest within intergroup research until recently. Guimond and Dumbrun (2002) were the first researchers who investigated, under controlled conditions, the impact of both, RD and RG, on intergroup prejudice. The results of Guimond’s and Dambrun’s (2002) experimental studies imply that “RG is one of the central variables in inter-group relations and an important cause of prejudice and discrimination, as important if not more important than RD” (p. 909). These results suggest that intergroup discrimination is likely to emerge under both conditions: in relative deprivation intergroup relations are perceived as deteriorating and in relative gratification intergroup relations are perceived as changing for the better. The latter challenges a common belief that anticipated economic prosperity is followed by positive intergroup relations, which according to the findings of Guimond and Dumbrun (2002), is not necessarily the case. The question that begs
answering then is: “What are the factors that would prevent intergroup prejudice?” The proposal by Guimond and Dambrun (2002) is that the answer lies in the goal of equality. The present study will report three experiments which aimed to replicate the effects of relative deprivation and relative gratification on prejudice as well as to systematically investigate Guimond and Dambrun’s (2002) proposal that experienced/anticipated equality reduces prejudice.

Relative derivation as term is used in two senses according to Crosby (1976). Firstly, it is used to refer to “one’s sense of grievance … [which] is not a monotonic function of one’s actual situation in an absolute sense”. Since deprivation is relative one will often find that “those who are the most deprived in an objective sense are not the ones most likely to experience deprivation” (Crosby, 1976, p. 85). Secondly, the concept of relative deprivation is used “to refer to the emotion one feels when making negatively discrepant comparisons” (Crosby, 1976, p. 88). Common emotions associated with relative deprivation are grievance or resentment, “the latter of which Webster’s identifies as ‘a feeling of indignant displeasure at something regarded as a wrong, insult, or injury’” (Crosby, 1976, 88). One could state that relative deprivation is a subjective feeling of discontent.

Crosby (1976) who introduced the “Model of Egoistic Relative Deprivation” states that since the pioneer study “The American Soldier” by Stouffer, Suchman, Devinney, Starr and Williams (1949) three comprehensive and detailed theories of relative deprivation were developed. The first formal theory of relative deprivation was proposed by Davis (1959, see Crosby, 1976, p. 88). Davis hypothesized as necessary preconditions of felt deprivation, that
an individual who lacks X (a desired good or opportunity) must (a) perceive that a similar other has X, (b) that s/he want X, and (c) that s/he feels entitled to X. The feeling of deprivation only occurs when all preconditions are present. The second theory of relative deprivation was – according to Crosby (1976) – introduced by Runciman (1966, see Crosby, 1976, p. 88). Runciman added in his theory a fourth precondition to the three preconditions defined by Davis: the individual must think that it is feasible to obtain X. Crosby (1976) reported that this inclusion allowed to distinguish between unrealistic hopes (which would not lead to deprivation) and reality-based aspiration (which would lead to deprivation). The third theory of relative deprivation was – according to Crosby (1976, p. 88) – proposed by Gurr (1970) who stated that the feeling of deprivation only occurs when the individual thinks that it is not feasible to obtain X. Crosby (1976) states correctly that the three theories overlap to a great extent. However, they also differ in respect to the preconditions assumed to be necessary for the feelings of deprivation, more specifically; these three theories differ with respect to the precondition of feasibility. Feasibility is a core precondition for Runciman (1966, see Crosby, 1976) since his theory of relative deprivation states that the feeling of deprivation only occurs when perceived feasibility is high. Contrary, Gurr’s (1970, see Crosby, 1976) theory states that the feeling of deprivation only occurs when perceived feasibility is low. In Davis’ (1959, see Crosby, 1976) theory perceived feasibility is not defined as a precondition for the feeling of deprivation at all. Crosby (1976) proposed based on the outlined three relative deprivation theories her own “Model of egoistical relative deprivation”. Her model states that for an individual to feel relative deprivation, five preconditions must be fulfilled: “A person who lacks X must (1) see that someone else (other)
possesses X, (2) want X, (3) feel entitled to X, (4) think it is feasible to obtain X, and (5) lacks a sense of personal responsibility for not having X.

Since Crosby (1976) a number of theories postulating more or less similar preconditions have been introduced (e.g. see Walker & Smith, 2002). In the present study the theoretical assumptions on relative deprivation as suggested by Martin (1981, cited from Guimond and Dambrun, 2002) will be used as theoretical framework. Martin (1981, cited from Guimond and Dambrun, 2002) outlined a four-variable model of RD. According to Martin, a pattern of distribution of reward (variable 1), i.e. a direction of change in prosperity, leads to a process of comparison, e.g. people compare their outcomes (variable 2). This process of comparison has an effect on a feeling of dissatisfaction, which is experienced as a perception of injustice (variable 3), which in turn has an effect on the resulting attitude or prejudice (variable 4). Thus, fundamental to the concept of relative deprivation is the process of social comparison. People experience relative deprivation, because they compare their conditions with those of others.

Relative deprivation can occur at different levels of analysis depending on the type of comparison involved (Guimond & Tougas, 1994, cited from Dambrun, Guimond & Taylor, 2005). Since Runciman (1966) it is distinguished between egoistical or personal relative deprivation and fraternalistic or group relative deprivation. Egoistical relative deprivation occurs as a result of a negative outcome of comparison between an individual and other individuals. In this case, the comparison reveals that s/he is worse off than other individuals; with those individuals being members of one’s ingroup. Fraternalistic relative deprivation
occurs as a result of a negative outcome of comparison between the position of the ingroup as opposed to the outgroup. In this case, the comparison reveals that the ingroup is worse off than the outgroup on some dimension, regardless of an individual’s own personal deprivation. Research comparing the roles of these two major types of relative deprivation has revealed that fraternalistic or group relative deprivation is the strongest predictor of intergroup attitudes such as prejudice (Dube & Guimond, 1983; Pettigrew & Meertens, 1995, cited from Guimond & Dambrun, 2002). For instance, a comprehensive study of prejudice towards immigrants in Europe found strong evidence for the role of group relative deprivation, but not personal relative deprivation (Pettigrew, Jackson, Ben Brika, Lemaine, Meertens, Wagner, & Zick, 1998, cited from Dambrun, Guimond & Taylor, 2005). A third major type of relative deprivation is that of temporal relative deprivation. Temporal relative deprivation refers to the ingroup’s status position at two different points in time, i.e. the present status position relative to the past or anticipated future position (Guimond & Dambrun, 2002). It was for instance observed in France, Netherlands, UK and West Germany, that people who felt that their ingroup had been economically worse off than the outgroup, over the last 5 years, displayed more ethnic prejudice, especially more blatant forms of prejudice, than those who did not have this perception. No such relationship was observed for personal relative deprivation (see Pettigrew et al., 1998, cited from Dambrun, Guimond & Taylor, 2005). Guimond and Dambrun (2002), suggest that a measure of group relative deprivation involving a temporal comparison is a much better predictor of prejudice, than similar measures without a temporal comparison. Pettigrew and Meertens (1995, cited from Guimond & Dambrun, 2002) found that the following measure of relative deprivation was strongly predictive of prejudice across seven samples coming from four different countries: “Would you say that over the last 5
years people like yourselves [in France] have been economically a lot better off, better off, the same, or a lot worse off than most [North Africans] living here?” (Guimond & Dambrun, 2002, p. 901). This item involves an intergroup comparison but also a temporal comparison (the reference to that “over the last 5 years”). Dambrun and Guimond (2001, cited from Guimond & Dambrun, 2002) have provided correlational evidence to suggest that measures of group relative deprivation involving temporal comparisons are more predictive of prejudice than similar measures without a temporal dimension.

Central to all relative deprivation theories is that relative deprivation consists of a cognitive and emotional component. The cognitive dimension refers to the perception of inequality, i.e. the perception of a discrepancy between one’s own position (either as a unique person or as a group member) and the position of a “referent other” on some evaluative dimensions. The affective dimension refers to the evaluation of perceived inequality which is assumed to determine the degree of resentment about the perceived gap between the two positions (Kawakami & Kenneth, 1995). The affective dimension is often described as mediating between perceived inequality (cognitive dimension) and intra-/inter-group behaviour (see Guimond & Dumbrun, 2002). A number of studies have shown that the affective component of relative deprivation mediates the effect of group relative deprivation on social attitudes and behaviours (Guimond & Dambrun, 2002). Guimond and Dube-Simard (1983, cited from Guimond & Dambrun, 2002), for instance, have shown that the effect of the perceived inequality between two groups (cognitive component) on support for a social movement is mediated by feelings of dissatisfaction stemming from an unfavourable comparison between the situation of the ingroup and that of the outgroup.
Relative deprivation theorists have long argued that when the outcome of social comparison is favourable, the result is a state of relative gratification, the opposite of relative deprivation (Martin, 1981; Vanneman & Pettigrew, 1972, cited from Guimond & Dambrun, 2002). When people are in a condition of relative gratification, they find themselves in a privileged position. One is tempted to say that for 50 years relative gratification as a positive comparison outcome and thus the opposite of relative deprivation did not attract much interest within intergroup research. According to Guimond and Dambrun (2002) the negligence of relative gratification contributed to the common belief that anticipated economic prosperity is followed by positive intergroup relations. However, recent research has challenged this belief.

Relative Gratification Theory has had little attention in comparison to Relative Deprivation Theory and was thought to be its opposite, therefore, decreasing prejudice (Pettigrew, 2002). Relative Gratification is commonly defined as the perception that one compares oneself favourably with others, thus, feeling privileged when compared to some relevant outgroup (Guimond, 2006). This then implied that during times of economic prosperity or improvement, less intergroup discrimination would occur. However, this assumption was – according to Guimond and Dambrun (2002) – already challenged by Grofmann and Muller (1973) in their article entitled “The Strange Case of the V-Curve Hypothesis” since they reported that “the greatest potential for political violence is manifested both by individuals who perceive negative change and by individuals who perceive positive change” (p. 514). Guimond and Dambrun (2002) tested the V-curve in two experiments (see figure 1) and they
hypothesized that both relative deprivation and relative gratification could lead to more negative intergroup attitudes, therefore increasing prejudice.

Grofmann and Muller’s (1973) V-curve depicted in Figure 1:

Figure 1: The effects of relative deprivation and gratification on prejudice, producing a V-curve pattern. NOTE: RD=relative deprivation, RG=relative gratification

Guimond and Dambrun (2002) tested the two assumptions through conducting two experiments in which they manipulated both relative deprivation and relative gratification by presenting conditions of either declining (relative deprivation) or improving (relative gratification) personal job opportunities (study 1) and group job opportunities (study 2) in the future. They measured prejudice in their experiments by the following range of scales: Generalized Prejudice (Guimond & Dambrun, 2001), Ethnocentrism (Neulip & McCroskey, 1997), Ingroup bias (Guimond & Dambrun, 2001), Immigration Policy (Guimond &
Dambrun, 2002 adapted from Pettigrew & Meertens, 1995) and Behavioural Intentions (Guimond & Dambrun, 2002 adapted from Altemeyer, 1988).

The first experiment focused on temporal relative deprivation and relative gratification. Temporal comparisons are those involving a comparison between one’s group’s present status, with the status of one’s group at another point in time (De la Sablonnie, Taylor, Perozzo & Sadykova, 2008). Participants were assigned to relative deprivation, relative gratification, or a control group and were told that they would be involved in a study on social perception and needed to complete a questionnaire. They were made aware of an official report (mock) dealing with job prospects. Those in the relative deprivation condition were led to believe that they would be deprived of a job in the future (“the unemployment rate was going to rise sharply in the next 4 or 5 years”) (Guimond & Dambrun, 2002, p. 902). A figure showing this decline over the years 1998-2005 was used to summarize this evidence. In the relative gratification condition, the mock report led the participants to expect the reverse, that there was a “high probability of finding a job” (Guimond & Dambrun, 2002, p. 903) once they had completed their studies. They were led to believe that “the unemployment rate was going to drop sharply” (Guimond & Dambrun, 2002, p. 903) and that for certain reasons, areas in the labour market were going to face a “shortage of manpower” (Guimond & Dambrun, 2002, p. 903), thus, they could expect a very high probability of finding a job. Again a figure was used to summarize this evidence. The participants in both of these conditions were confronted with temporal comparisons in relation to job opportunities. It was assumed that students who pursue a tertiary education would feel entitled to a reasonably good job once they had graduated. Those in the relative deprivation condition would feel a violation of this
expectation, thus, generating feelings of discontent. Those in the relative gratification condition would experience the opposite and feelings of satisfaction would be generated. In the control condition no temporal comparisons regarding job opportunities were provided.

Two hypotheses were tested: the first hypothesis stated that students in the relative deprivation condition would express more prejudice than those in the control group. The second hypothesis stated that those in the relative gratification condition would also express more intergroup prejudice than the control group. The results revealed that there was no significant effect of relative deprivation on prejudice; however, the effect of relative gratification revealed significantly higher levels of prejudice than those in the control condition. This was observed on the generalized prejudice scale, the ethnocentricism scale, and the ingroup bias scale. The results show that when investigating intergroup discrimination, or political violence as by Groffman and Muller (1973), relative gratification is as an important factor as relative deprivation.

The second experiment of Dambrun and Guimond (2002) was similar to the first; however an intergroup dimension to the temporal comparison was added. The hypotheses tested in the second experiment were the same as in the first experiment: the first hypothesis stated that students in the relative deprivation condition would express more prejudice than those in the control group. The second hypothesis stated that participants in the relative gratification condition would also express more intergroup prejudice than those in the control group.
The second study aimed also to find explanations for the relative gratification effect. Two theoretical considerations were tested: First, Bodenhausen, Kramer, and Süsser (1994) have argued that when people are confronted with favourable temporal or social comparisons, these comparisons may produce positive feelings or a happy mood. The result of the happy mood, as argued by Bodenhausen, Kramer and Süsser (1994), leads to greater stereotyping and prejudice. They argue that stereotypes operate as heuristic cues in social information processing, which provide a basis for a quick response to members of outgroups. These quick responses (stereotypes) allow the social perceivers a short cut when needing to process social information specifically when they cannot, or prefer not to, engage in a more thoughtful analysis of the unique personal qualities of specific outgroup members. Bodenhausen, Kramer and Süsser (1994), thus, argue that when people are made happy prior to the presentation of a persuasive message, they are less affected by argument quality. Happy people appear to accept weak messages just as willingly as those founded on stronger arguments. Thus, it is argued that when people are in a happy mood, they are more likely to use heuristic processing strategies. The happy mood leads to greater stereotyping and consequently prejudice. The happy mood can be equated to a sense of relative gratification, thus happy mood is assumed to increase prejudice.

Secondly, Guimond and Dambrun (2002) made use of social dominance theory (Sidanius & Pratto, 1999) in support of their proposition that relative gratification may foster higher levels of prejudice and discrimination. Social dominance theory suggests that cognitive products such as stereotyping and prejudice, serve a social function, that of legitimizing social inequality. Dominant groups and individuals scoring high on social dominance orientation are
more likely to subscribe to legitimizing myths directed toward a particular target group or a whole range of groups in order to justify the existing inequality. When people are in a condition of relative gratification they find themselves in a privileged position which may lead to greater stereotyping and prejudice in order to justify their privileges (see also Leach, Snider & Iyer, 2002).

The second experiment followed the same procedure as the first experiment except that the official report (mock) referred to an intergroup situation by dealing with job opportunities for students in psychology (ingroup) and students in economics/law (outgroup). The relative deprivation condition led participants (psychology students) to believe that job opportunities for students in the two areas were presented as similar at first but becoming increasingly differentiated over time in favour of students in economics/law. Participants were told that their ingroup (psychology students) would be a lot worse off economically than the outgroup (economics/law students) in the years ahead. To make the provided information more salient a figure was used to summarize this evidence. Those participants in the relative gratification condition were told the opposite, that their ingroup (psychology students) were going to benefit in the years ahead from much more favourable job opportunities than the outgroup (economics/law students). The participants in the control condition were not provided with any information concerning job opportunities.

The results of the second experiment revealed an effect of group relative deprivation on generalized prejudice, that is to say, participants in the relative deprivation condition scored higher on generalized prejudice toward the outgroup than participants in the control group.
The results revealed a similar effect of relative gratification, that is, participants in the relative gratification condition scored significantly higher on the generalized prejudice scale than those in the control group. Participants in the relative gratification condition also obtained a significantly greater bias toward the outgroup (measure of ingroup bias) and displayed a significantly greater tendency to favour their own group (measure of generalized ingroup bias) than participants in the control condition. Further, participants in the relative gratification condition indicated more support for an immigration policy orientation aiming to send immigrants back to where they came than did participants in the control group (Guimond & Dambrun, 2002, p. 907).

Additionally, Guimond and Dambrun (2002) aimed to control for two theoretical concepts that could explain the effect of relative gratification on prejudice. These concepts included measures of social dominance orientation and positive mood. Ten items from the social dominance orientation scale developed by Pratto et al (1994, as cited in Guimond & Dambrun, 2002) were included in their study in order to measure the extent to which individuals would support the domination of certain social groups over other groups. Secondly, three items which measured mood states, in accordance to those used by Bodenhausen et al. (1994), were included. The results indicate that neither happy mood nor social dominance orientation fully account for the effect of relative gratification on intergroup discrimination or prejudice. Guimond and Dambrun state that their analysis “indicate(s) that perceiving an improvement in the social position of the ingroup compared to an outgroup, the cognitive component of group relative gratification, accounts for the effect of experimental conditions on prejudice” (Guimond and Dambrun, 2002, p. 909). Guimond and Dambrun’s
results do reveal, that the effect of group relative gratification seems to be driven mainly be cognitive, rather, than affective variables.

Dambrun, McDonald, Taylor, Crush, and Méot (2006) tested similar hypotheses in a field study conducted in South Africa, which yielded similar results to Guimond and Dambrun’s (2002) study. Dambrun’s at al. (2002) study, entitled “The Relative Deprivation-Gratification Continuum and the Attitudes of South Africans Toward Immigrants: A Test of the V-Curve Hypothesis”, aimed to establish that both relative deprivation and relative gratification are associated with higher levels of prejudice, in support of the V-curve hypothesis. The authors applied the hypotheses as tested by Guimond and Dambrun (2002) to the South African context, by stating that hostility toward immigrants is associated, not only with perceptions of economic deprivation, but also with perceptions of economic improvement or gratification. They firstly hypothesized that those who felt worse off (relative deprivation) and those who felt better off (relative gratification) would both display more prejudice. Secondly, they hypothesized that the strength of ones ethnic identification would mediate the effect of relative gratification on prejudice toward immigrants. Dambrun, Taylor, McDonald, Crush, and Méot (2006, p.1034) refer in their argumentations to social identity theory (Tajfel & Turner, 1986, 2001) which states that people are motivated to maintain or achieve positive social identity. Self concept is partially derived through group membership as group membership positively influences self-esteem through favourable intergroup comparisons, thus resulting in one identifying more strongly with the group with one belongs than with an outgroup. The authors argue that in the context of relative gratification, people may identify even more strongly with their social group since a group experiencing status improvement is
likely to provide its members with positive social identity. They further argue that this should then result in stronger ingroup identification and increase in ingroup bias and outgroup derogation, thus, they predict that group identification would mediate the effect of relative gratification on intergroup attitudes. Their final aim was to determine whether economic relative gratification would produce hostility toward all outgroups, therefore, suggesting that it would generate generalized prejudice; or, whether it would lead to hostility toward specific outgroups. They hypothesized that among low socio-economic status (SES) South Africans, relative gratification should be more strongly associated with prejudice toward African immigrants than with prejudice toward Western immigrants. They argued that low SES South Africans perceiving relative gratification would perceive low status immigrants (African immigrants) as potential competitors but would tend to disregard high status immigrants (Western immigrants) as potential competitors. Among high SES South Africans, it was hypothesized, that relative gratification should be more strongly associated with prejudice toward Western immigrants than with prejudice toward African immigrants. They argued that high status immigrants (Western immigrants) would be perceived as more of a threat than low status immigrants (African immigrants) by high SES people perceiving economic relative gratification.

The results of Dambrun et al.’s (2006) study confirmed the first hypothesis. Both relative deprivation and relative gratification were associated with greater levels of prejudice. The second hypothesis, which stated that the strength of ones ethnic identification would mediate the effect of relative gratification on prejudice toward immigrants, was partially confirmed since ethnic identification only partially mediated the relationship between relative
gratification and prejudice. Twenty four percent of the effect of relative gratification on prejudice toward *African immigrants* was mediated by ethnic identification, indicating a partial mediation; and 12% of the effect of relative gratification on prejudice toward *Western immigrants* was mediated by the measure of ethnic identification, also indicating a partial mediation.

Dambrun, Taylor, McDonald, Crush, and Méot (2006) hypothesized that among low SES South Africans relative gratification would be more strongly associated with prejudice toward African immigrants than with prejudice toward Western immigrants. The opposite was predicted for those among high SES South Africans – that relative gratification would be more strongly associated with greater levels of prejudice toward Western immigrants than with prejudice toward African immigrants. The results revealed that the interaction between relative gratification and SES was significant. Interaction reveals that the more high SES South Africans perceived relative gratification, the more they derogated Western immigrants compared to African immigrants. However, low SES South Africans perceiving relative gratification were not more prejudiced toward African immigrants than Western immigrants as expected. Rather, they targeted both outgroups equally.

Dambrun et al., (2006), in their field study, confirmed the results of Guimond and Dambrun’s (2002) experiments, highlighting the key role of relative deprivation, and, additionally, confirming the significant role of relative gratification, as an effect on intergroup attitudes. Guimond and Dambrun (2002) explain that their experiments revealed that psychological reactions towards immigrants resulted from the existence of inequality (either relative...
deprivation or relative gratification). They argue that the reasons why both economic scarcity and economic prosperity lead to intergroup conflict may be associated with economic inequality. The disparity between rich and poor increases during periods of economic prosperity, therefore, Guimond and Dambrun (2002, p. 910) suggest that in order to prevent destructive conflicts, the goal of equality rather than economic improvement has to be kept in mind. Following their suggestion, the present study aimed, in three experiments, to replicate the effects of relative deprivation and relative gratification on intergroup discrimination, as well as to test Guimond and Dambrun’s (2002) proposal that equality would reduce prejudice.

**EXPERIMENT 1**

The first experiment attempted to directly replicate Guimond and Dambrun’s experimental study (2002) by manipulating relative deprivation and relative gratification. Experiment 1 controlled also for the proposed positive effect of equality. As in the experiment of Guimond and Dambrun (2002) psychology students were presented with evidence (bogus article) revealing that future job opportunities for psychology students (ingroup) were going to decrease sharply in the next few years, whereas job opportunities for economics students (outgroup) were going to rise considerably. This information aimed to create the condition for relative deprivation. Relative gratification was manipulated in a similar way, revealing that future job opportunities for psychology students (ingroup) were going to increase sharply in the next few years, whereas job opportunities for economics students (outgroup) were going to drop considerably. Further, for the condition of equality, psychology students were presented with evidence revealing that psychology students and economics students would be in equal demand in the following years.
It was expected that participants in the relative deprivation condition and relative gratification condition would express more prejudice than those in a control group. These two effects would allow us to confirm both Grofman and Muller’s (1973) V-curve hypothesis and Guimond and Dambrun’s (2002) findings. Further, it was expected that under the condition of equality participants would not differ in their prejudice from the control group, as suggested by Guimond and Dambrun (2002).

**METHOD**

**Sample**

Participants included 220 psychology students from the University of Fort Hare (East London), with an average age of 23.7 years ranging from 17 to 46. One hundred and forty seven (147) were females and 66 were males. Eight did not indicate their gender. Sixty one percent of participants were first year psychology students and the remainder were second and third year psychology students. Participants were recruited either before or after their Psychology lectures from their lecture venues.

**Procedure**

In the three experimental conditions participants were told that they would be involved in a study on how people react to unexpected news and that they would individually be required to fill out a paper-and-pencil questionnaire. Before filling out the questionnaire, participants in the relative deprivation, relative gratification and equality conditions were given an article to read, which was supposedly published by the national newspaper, *The Sunday Times*. The
article dealt with job prospects for Psychology students as well as Economics students. In the relative deprivation condition, the article was used to lead participants to believe that employment prospects for them were going to severely decrease in the next 4 to 6 years. Experts would expect an increase in job opportunities for Economics graduates within the next four years which would be expected to outshine the increase of job opportunities for Psychology graduates in the last ten years, thus resulting in a greater demand for economics graduates than the demand for psychology graduates. In the relative gratification condition, the article led participants to expect that the demand for psychology graduates would greatly exceed the demand for economics graduates. In the equality condition, participants were led to believe that the experts could expect that there would be, within the next four years, an equal increase in job opportunities, as well as an equal demand, for psychology graduates and economics graduates (see Appendix A). After the participants read the article, they were asked to fill in a questionnaire. In the control condition, no comparisons of job opportunities were provided. Participants in the control condition were asked to complete a questionnaire on social perception.

Participants were randomly assigned to one of the four conditions by using www.randomizer.org. The conditions were as follows: control group (51 participants); Relative Deprivation (58 participants); Relative Gratification (59 participants); and Equality (52 participants). Participation was voluntary and an incentive of inclusion into a lucky draw to win a R100 was motivation to participate in the study. Students were debriefed by way of debriefing forms which were attached to relevant notice boards.
**Measurements**

The questionnaire included four measures of prejudice that are labeled, respectively, generalized prejudice, ethnocentrism, behavioural intention to support immigration policy and Ingroup Bias. All the measures used a 5-point Likert type scale.

*Generalized prejudice* was measured by 14 out of 15 items as reported by Guimond and Dambrun (2002). The authors provided the 15 item scale in French on request which was translated by an assistant into English. The translation of one item revealed to be difficult and it was agreed on not to include this particular item. The final scale included nine positive statements (e.g. “The diversity brought in by foreigners is enriching to South Africa) and five negative statements (e.g. “If there is a lot of unemployment in South Africa, it is because immigrants take South Africans’ jobs”). The internal consistency of this scale in the Guimond and Dambrun study (2002) was found to be satisfactory (a = .89). In the present study only those items were included with a Corrected Item-Total Correlation larger than .3. Five out of the 14 items fulfilled this criterion: items 2, 4, 5, 6, and 8 (see Appendix B). The reliability revealed to be reasonable with a Cronbach’s alpha of .68.

*Ethnocentrism* was measured by the 24-item revised ethnocentrism scale. This scale was developed by Neulip and Mc Crosky (1997) and has a reported Cronbach’s alpha of .92. In the present study the word ‘culture’ was replaced with ‘South Africa’ (e.g. “My South African nation should be the role model for other nations”) since South Africa consists of different cultures. Ten out of the 24 items met the criterion to have a Corrected Item-Total
Correlation larger than .3. These items were: 4, 7, 9, 11, 12, 14, 17, 18, 22 and 23 (see Appendix B). The reliability revealed to be satisfactory (a =.80). The scale of ethnocentrism correlated significantly with the scale of generalized prejudice ($r = .20$, $p<.01$), providing evidence of convergent validity. Higher scores on these two scales indicate greater prejudice or ethnocentrism.

*Ingroup bias* as a third measure was assessed by two items. Participants were asked to rate on a 5-point Likert type scale the extent to which they were *most unfavourable* (1) or *most favourable* (5) toward their ingroup and Economics students (outgroup). Ingroup bias was calculated by subtracting the attitudes toward the ingroup from the outgroup. This measure was found to correlate significantly with generalized prejudice ($r = .16$, $p<.05$) but not with ethnocentrism ($r = .12$, $p=ns$).

*Behavioural intention* was assessed by five items. Participants were asked to rate on a 5-point Likert type scale the extent to which they were *most unwilling* (1) or *most willing* (5) to engage in behaviour regarding immigration policies (e.g. “Tell the police about known illegal immigrants”). In the present study, this scale had a Cronbach’s Alpha of .84. This measure was found to correlate significantly with generalized prejudice ($r = .24$, $p<.001$).

**RESULTS**

**Preliminary Analysis (Manipulation Check)**

Participants of the experimental groups were asked which graduates will be more in demand. In total, 74.1% of participants in the relative deprivation condition indicated that economic
students (outgroup) are the graduates in demand. Eighty five percent of participants in the relative gratification condition indicated that psychology students will be in demand; and 82.4% of the participants in the equality condition reported that both, psychology and economic students will be in demand. These results indicate that the manipulation of the experiment was mainly successful.

Main Analysis

The effect of relative deprivation. The first hypothesis stated that participants in the relative deprivation condition will express more intergroup discrimination than those in the control condition. This hypothesis was confirmed for generalized prejudice. Participants in the relative deprivation condition (M=3.93, SD=.66) expressed significantly more prejudice toward outgroup than participants in the control condition (M=2.44, SD=.53), $F(1,107)=163.116, p<.001$.

The effect of relative gratification. The second hypothesis stated that participants in the relative gratification condition will express more intergroup discrimination than those in the control condition. This hypothesis was confirmed for generalized prejudice. Participants in the relative gratification condition expressed significantly more prejudice (M = 3.78, SD = .77) than those in the control condition (M = 2.44, SD = .53), $F(1,108)=108.014, p<.001$.

The effect of equality. The third hypothesis stated that the level of intergroup discrimination of participants in the equality condition should not differ from the control group. This experiment, however, revealed results with respect to generalized prejudice that directly...
opposed the hypothesis. Participants in the equality condition expressed significantly more generalized prejudice (M= 3.68, SD=.75) than those in the control condition (M= 2.44, SD=.53), $F(1,101) = 90.641, p<.001$.

The results of experiment 1 are summarized in Figure 2.

![Figure 2: The effects of relative deprivation, gratification and equality on Generalized Prejudice](image)

DISCUSSION

The first aim of this experiment was to replicate the results of Guimond and Dambrun’s (2002) experiments by conducting the very same experiment. The experiment replicated the results of Guimond and Dambrun in respect to the measure of generalized prejudice: both, relative deprivation and relative gratification increases generalized prejudice. However, this experiment failed to show the impact of relative gratification on the other measures such as
ethnocentrism, ingroup bias, and behavioural intentions to immigration policy as found by Guimond and Dambrun (2002, p. 907).

The second aim of this experiment was to test the assumption, proposed by Guimond and Dambrun (2002), that equality might be the solution to reduce prejudice. However, the results of this experiment are pointing in the opposite direction. In the present study it was found that equality manipulation led to an increase in generalized prejudice. In order to conclude that equality might not be the solution as proposed by Guimond and Dambrun (2002), it was necessary to replicate the findings in a second experiment using a different intergroup context.

**EXPERIMENT 2**

In the second experiment, the focus was also on equality and the replication of Guimond and Dambrun’s (2002) findings, however, it was placed in a different intergroup context. Law students were led to believe that due to the 2010 Soccer World Cup, job prospects were set to either increase (for the relative gratification condition) or decrease (for the relative deprivation group) for University of Fort Hare students graduating in the next 3 years in comparison to Nelson Mandela Metropolitan University students from Port Elizabeth (Games for the 2010 Soccer World Cup have been set to be played in Port Elizabeth and not East London). Those in the equality condition were led to believe that there would be equal job prospects for both University of Fort Hare students and Nelson Mandela Metropolitan University students (the equality condition).
Experiment 2 aimed to replicate the results of experiment 1. Therefore it was hypothesized that participants in the relative deprivation and relative gratification conditions were expected to express higher levels of prejudice than those in the control condition. According to the results found in experiment 1 it was further hypothesized that participants in the equality condition express higher levels of prejudice than in the control condition.

**METHOD**

**Sample**

Participants included 200 law students at the University of Fort Hare (East London), with an average age of 23.1 years ranging from 17 to 53. One hundred and one were females and 90 were males. Nine did not indicate their gender. Seventy eight percent of participants were first year law students and the remainder were second and third year law students. Participants were recruited either before or after their law lectures in their lecture venues.

**Procedure**

As in the previous experiment, participants were told that they would be involved in a study on how people react to unexpected news and that they would individually be required to fill out a paper-and-pencil questionnaire. Before filling out the questionnaire participants in the relative deprivation, relative gratification and equality conditions were given an article to read, which was supposedly published by the local newspaper, *The Daily Dispatch*. The article dealt with job prospects for students from the University of Fort Hare, East London and the Nelson Mandela Metropolitan University, in Port Elizabeth. In the relative deprivation condition, the article was used to lead participants to believe that employment
prospects for them were going to severely decrease in the next 4 to 6 years. As a result, prospects were looking very good for Port Elizabeth graduates, whilst East London would experience a severe decrease in employment prospects. In the relative gratification condition, the article led participants to expect that employment prospects were looking very good for the University of Fort Hare students as opposed to Port Elizabeth graduates. In the equality condition, participants were led to believe that equal budgets had been allocated to both East London and Port Elizabeth, and job prospects were looking equally good for both of the university graduates (see Appendix C). The control condition, no comparisons of job opportunities were provided. Participants were then asked to complete a questionnaire on social perception.

As in the first experiment, participants were randomly assigned to one of the four conditions by using www.randomizer.org. The conditions were as follows: control group (50 participants); Relative Deprivation (50 participants); Relative Gratification (51 participants); and Equality (49 participants). Again, as in the first experiment, participation was voluntary and the lucky draw of R100 was motivation to participate in the study. Students were debriefed by way of debriefing forms which were attached to relevant notice boards.

**Measurements**

The questionnaire in the second experiment included the very same four measures of intergroup discrimination as used in Experiment 1. However, the items which were used to combine the final variables for Generalized Prejudice and Ethnocentrism differed. The same
two items for *Ingroup Bias* were used in experiment 2, and the same five items to measure *Behavioural Intention* to engage in immigration policy were used (a = .90).

The same 14 item *generalized prejudice* scale, as in the first experiment was used, however different items fulfilled the criterion to have a Corrected Item-Total Correlation of larger than .3. In this experiment, only four items fulfilled this criterion: items 2, 4, 5, and 6 (see Appendix D). The scale for generalized prejudice revealed to have a sufficient internal consistency (a = .60).

*Ethnocentrism* was measured by the same 24 item scale. Again, only those items with a Corrected Item-Total Correlation of higher than .3 were used. Eleven items of the 24 items fulfilled this criterion: items 2, 3, 4, 7, 9, 11, 12, 14, 17, 18 and 22 (see Appendix D). The scale had a Cronbach’s alpha of .77. Ethnocentrism correlated significantly with behavioural intention (r = .54, p < .001) and with generalized prejudice (r = .51, p < .001), providing again evidence of convergent validity.

**RESULTS**

**Preliminary Analysis (Manipulation check)**

Participants of the three experimental conditions were asked to rate three statements related to the fate of the ingroup (I feel that the fate of East London students is improving over time), the outgroup (I feel that the fate of Port Elizabeth students is improving over time), and both groups (I feel the fate of East London students is improving at the same level with that of Port Elizabeth students). The ANOVA revealed, $F(2, 143) = 11.61, p < .001$, that participants in
relative deprivation condition (M=3.98, SD=.79) and in the equality condition (M=3.78, SD=.75) scored significant higher on the statement related to the outgroup than participants in the relative gratification condition (M=3.2, SD=.94), Bonferroni post-hoc-statistic $p<.001$ and $p<.01$, respectively. However, participants in the relative deprivation condition did not differ in their scores from participants in the equality condition. In respect to the statement relating to the ingroup, $F(2,145)=14.17$, $p<.001$, participants in the relative deprivation condition (M=2.92, SD=1.1) scored significant lower relative to the participants in the relative gratification condition (M=3.9, SD=.95) and in the equality condition (M=3.72, SD=.86), Bonferroni post-hoc-statistic $p<.001$ and $p<.001$, respectively. Participants in the relative gratification condition and in the equality condition did not differ significantly from each other. In respect to the statement related to the fate of both groups, the mean score of the participants in the equality condition (M=3.02, SD=1.15) was higher as expected relative to the relative deprivation (M=2.51, SD=1.04) and the relative gratification condition (M=2.82, SD=1.02). However, the differences were not statistically significant, $F(2,143)=2.77$, $p=ns$.

The results of the manipulation check indicate that the manipulation was only partially successful, which will be taken into account when interpreting and discussing the results.

**Main Analysis**

**The effect of relative deprivation.** The first hypothesis stated that participants in the Relative Deprivation condition will express more intergroup discrimination than those in the control condition. This hypothesis could not be confirmed in terms of statistical significance, $F(1, 98)=.827$, $p=ns$, although the measure for ethnocentrism pointed in the expected direction (relative deprivation condition: M=3.03, SD=.71; control condition: M=2.91, SD=.58).
The effect of relative gratification. Our second hypothesis stated that participants in the relative gratification condition will express more intergroup discrimination than those in the control condition. This hypothesis was confirmed for ethnocentrism. Participants in the relative gratification condition expressed significantly more ethnocentrism (M= 3.18, SD= .57) than those in the control condition (M= 2.91, SD=.58), \( F(1, 99) = 5.5, p < .05 \).

The effect of equality. The third hypothesis stated in accordance to the results gained in experiment 1 that participant in the equality condition express higher levels of prejudice than in the control condition. The results of experiment 2 confirmed this hypothesis for ethnocentrism as a measure of intergroup discrimination. Participants in the equality condition expressed significantly more ethnocentrism (M= 3.24, SD=.67) than those in the control condition (M= 2.91, SD=.58), \( F(1, 97) = 6.996, p < .05 \).
The results of experiment 2 are summarized in figure 3:

Figure 3: The effects of group relative deprivation, gratification and equality on Ethnocentrism

**DISCUSSION**

The aim of the second experiment was to replicate the results of experiment 1 in respect to relative deprivation and relative gratification as found by Guimond and Dambrun (2002) and in respect to equality as found in experiment 1 using a different intergroup context. The first hypothesis, that relative deprivation increases prejudice, could not be statistically confirmed in this experiment. The second hypothesis, that relative gratification increases prejudice, could be confirmed for the ethnocentrism measure but not for any of the other measures. The third hypothesis, that equality does increase levels of prejudice, could be confirmed for the ethnocentrism measure. The effect of relative gratification and equality could be replicated, thus revealing that the more one perceives a sense of relative gratification and the more that one perceives equality, the more ethnocentric one becomes.
The positive relationship between equality and prejudice might be a result of the manipulation applied in the two experiments, which would address the validity. Equality was manipulated as “equal improvement”. It could be possible that “improvement” was more salient for the participants than “equality”, thus mimicking a second relative gratification condition. In light of this, it was important to conduct a third experiment in order to control for what participants may regard as “improvement”. Therefore it was decided to control for three possible kinds of equality: Equality Decreasing, which we hypothesized to have a similar effect as relative deprivation; Equality Increasing, which we hypothesized to have a similar effect as relative gratification; and Equality Stable, which we hypothesized to make the true meaning of ‘equality’ salient. For latter we assumed a reduction in prejudice.

**EXPERIMENT 3**

This experiment sought to establish what form of equality would lead to a decrease in prejudice. In order to determine whether equality does decrease prejudice we had to use three forms of equality conditions as we did not know what the term ‘equality’ made salient in the first two experiments. The Equality Decreasing condition was hypothesized to have the same reaction as the Relative Deprivation condition. The Equality Increasing condition was hypothesized to have the same reaction as the Relative Gratification condition. The Equality Stable condition was hypothesized to be seen as the ‘true’ form of equality experienced and, thus, hypothesized to decrease prejudice.
We expected that participants in the group relative deprivation condition would express more intergroup discrimination than those in the control group. We expected that a condition of group relative gratification would increase intergroup discrimination relative to the control condition. Further, we expected that the Equality Decreasing condition would increase prejudice relative to a control group, as would the condition of Equality Increasing. Equality Stable was hypothesized to decrease prejudice relative to the control group.

**METHOD**

**Sample**

Participants included 180 psychology students at the University of Fort Hare (Alice), with an average age of 23.9 years ranging from 16 to 46. One hundred and forty two (142) were females and 37 were males. One did not indicate her/his gender. Fifty nine percent of participants were second year psychology students and the remainder were first and third year psychology students. Participants were recruited before their Psychology lecture in Alice.

**Procedure**

In the third experiment participants were again told that they would be involved in a study on how people react to unexpected news and that they would individually be required to fill out a paper-and-pencil questionnaire. Before filling out the questionnaire, participants in the relative deprivation, relative gratification, equality decreasing, equality increasing and equality stable conditions were given an article to read, which was supposedly published by the national newspaper, *The Sunday Times*. The article dealt with job prospects for Bachelor of Social Science students as well as Bachelor of Commerce students. In the relative
deprivation condition, the article was used to lead participants to believe that employment prospects for them were going to severely decrease in the next 4 to 6 years, resulting in the demand for Bachelor of Commerce graduates greatly exceeding the demand for Bachelor of Social Science graduates. In the relative gratification condition, the article led participants to expect that the Bachelor of Social Science graduates would greatly exceed the demand for Bachelor of Commerce graduates, in order to alleviate the problems. In the equality decreasing condition, participants were led to believe that they could expect an equal decrease in job opportunities for Bachelor of Social Science graduates and Bachelor of Commerce graduates. Similarly, in the Equality Increasing condition, participants were led to believe that the demand for Bachelor of Social Science graduates and Bachelor of Commerce graduates would equally increase in the next few years. The Equality Stable condition led the participants to believe that the demand for both Bachelor of Social Science and Bachelor of Commerce students would equally remain stable in the next few years, thus eliminating any form of employment competition (see Appendix E). Participants in control condition were provided with no comparisons of job opportunities and they were asked to complete a questionnaire on social perception.

Once again, participants were randomly assigned to one of the six conditions by using www.randomizer.org. The conditions were as follows: control group (30 participants); Relative Deprivation (30 participants); Relative Gratification (30 participants); Equality Decreasing (30 participants); Equality Increasing (30 participants); and Equality Stable (30 participants). As in the experiment 1 and experiment 2, participation in the third experiment was voluntary and an incentive of inclusion into a lucky draw to win a R100 was motivation
to participate in the study. Students were debriefed by way of debriefing forms which were attached to relevant notice boards.

**Measurements**

As in the first two experiments, experiment 1 and experiment 2, the questionnaire included the same four measures of prejudice that are labeled, respectively, Generalized Prejudice (a = .69), Ethnocentrism (a = .80), Behavioural Intention to support Immigration Policy (a = .86), and Ingroup Bias. However, the items which were used to combine the final variables for Generalized Prejudice and Ethnocentrism differed from the first two experiments. All the measures used a 5-point Likert-type scale.

Generalized prejudice was again measured with the 14-item scale. Only those items with a Corrected Item-Total Correlation of higher than .3 were used. In this experiment, only five out of the 14 fulfilled this criterion: items 3, 5, 10, 11 and 13 (see Appendix F).

Ethnocentrism was measured by the same 24-item scale. Again, only those items with a Corrected Item-Total Correlation of higher than .3 were included in the final variable. Nine items of the 24 items fulfilled this criterion: items 4, 9, 11, 12, 14, 17, 19, 22 and 23 (see Appendix F).

Behavioural Intention correlated significantly with ethnocentrism (r = .37, p<.001) and generalized prejudice (r = .17, p<.03. Ethnocentrism correlates significantly with generalized prejudice (r = .30, p<.001) and ingroup bias (r = .19, p<.017). These results provide again
evidence of convergent validity. Higher scores on the generalized prejudice scale and ethnocentrism indicate greater prejudice or ethnocentrism.

**RESULTS**

**Preliminary Analysis (Manipulation check)**

Participants of the five experimental conditions were asked to rate three statements related to the fate of the ingroup (testing relative gratification and equal improvement: I feel that only the fate of Bachelor of Social Science students is improving over time), the outgroup (testing relative deprivation and equal decrease: I feel that only the fate of Bachelor of Commerce students is improving over time), and both groups (testing equality stable: The job opportunities of Bachelor of Social Science students and Bachelor of Commerce students will both remain constant). The ANOVA revealed, $F(4,143)=2.11$, $p=ns$, that participants in relative deprivation condition ($M= 3.42$, $SD= 1.25$) and in the equality decreasing condition ($M= 3.33$, $SD=1.12$) did not differ significantly (although the scores point in the expected direction) from the scores of participants in the remaining experimental conditions (relative gratification: $M= 2.66$, $SD= 1.37$; equality improving: $M= 3.13$, $SD= 1.16$; equality stable: $M= 2.8$, $SD= 1.24$) in respect to the statement relating to the outgroup. In respect to the statement relating to the ingroup similar results were found. Participants in the relative gratification condition ($M= 3.2$, $SD= 1.24$) and equality improving condition ($M= 2.9$, $SD= 1.06$) did not score significantly higher (as expected) compared to the participants in the remaining conditions (relative deprivation: $M= 3.03$, $SD= 1.29$; equality decreasing: $M= 3.51$, $SD= 1.12$; equality stable: $M= 3.03$, $SD= 1.09$), $F(4,140)=1.21$, $p=ns$. In respect to the statement relating to equality stable no significant differences were found although the scores
point to the expected direction. Participants in the equal stable condition (M= 3.36, SD= 1.18) did not score significantly different from the participants in the remaining conditions (relative deprivation: M=2.93, SD=1.27; Relative gratification: M=2.46, SD=1.30; equality decreasing: M= 3.00, SD=1.08; equality increasing: M= 2.90, SD=1.24), $F(4,144)=2.06$, $p=ns$. The results of the manipulation check indicate that the success of the manipulation could not be confirmed by the applied measures, which will be taken into account when interpreting the results.

**Main analysis**

**The effect of RD.** The first hypothesis stated that participants in the Relative Deprivation condition will express more intergroup discrimination than those in the control condition. This hypothesis was confirmed for ingroup bias as intergroup discrimination measure. Participants in the Relative Deprivation condition (M=1.07, SD=1.49) expressed significantly more ingroup bias than participants in the control condition (M= -3.60, SD= 1.61), $F(1,52)=121.566$, $p< .001$.

**The effect of RG.** Our second hypothesis stated that participants in the Relative Gratification condition will express more intergroup discrimination than those in the control condition. This hypothesis was confirmed for generalized prejudice as an intergroup discrimination measure. Participants in the Relative Gratification condition expressed significantly more prejudice (M=4.46, SD=.46) than those in the control condition (M= 3.87, SD= 1.01), $F (1, 58) =8.178$, $p< .01$. 
The results are summarized in the following two graphs. The solid line indicates significant differences.

Figure 4: The effects of relative deprivation and gratification on Ingroup Bias, partially replicating the V-curve
Figure 5: The effects of relative deprivation and gratification on Generalized Prejudice, partially replicating the V-curve

**The effect of Equality “Decreasing”**: As third hypothesis we expected that the Equality Decreasing condition would increase prejudice relative to a control group. The results of experiment 3 confirmed this hypothesis for ingroup bias as a measure of intergroup discrimination. Participants in the equality condition expressed significantly more ingroup bias (M= 1.55, SD= 1.61) than those in the control condition (M= -3.60, SD= 1.61), $F(1,55)= 119.943, p<.001$.

**The effect of Equality “Increasing”**: As third hypothesis we expected that the Equality Increasing condition would increase prejudice relative to a control group. The results of experiment 3 confirmed this hypothesis for ingroup bias as a measure of intergroup discrimination. Participants in the equality condition expressed significantly more ingroup
bias (M= 0.77, SD= 1.50) than those in the control condition (M= -3.60, SD= 1.61), $F (1,53) = 108.295, p<.001$.

The results are summarized in the following two graphs:

![Graph showing V-curve]

Figure 6: The effects of equality decreasing and equality increasing on Ingroup Bias, replicating the V-curve. NOTE: Equality RD= equality decreasing, Equality RG= equality increasing

**The effect of Equality “Stable”**. As fifth hypothesis we expected that the Equality Stability condition would have no effect prejudice, that is to say, participants in condition Equality stable should not be different in their prejudice from participants in the control condition. The results of experiment 3 do not confirm this hypothesis for ingroup bias as a measure of intergroup discrimination. Participants in the equality condition expressed significantly more ingroup bias (M= 1.10, SD= 1.19) than those in the control condition (M= -3.60, SD= 1.61), $F (1,54) = 153.641, p<.001$. 
The results are summarized in Figure 7:

![Experiment 3](image)

**Figure 7**: The effect of equality stable on Ingroup Bias

**DISCUSSION**

As in the first two experiments, and in accordance to the study of Guimond and Dambrun (2002), this experiment confirmed that relative deprivation does increase ingroup bias, and relative gratification does increase generalized prejudice. The replication of the impact of relative deprivation and relative gratification in all three experiments provide further evidence for the robustness of these relationships.

The second aim of the third experiment was to test whether equality does in fact reduce prejudice by controlling for three different types of equality. For the condition Equality Decreasing it was assumed that the effect of relative deprivation would be salient and an increase in prejudice was expected. Controlling for Equality Increasing, we assumed that the effect of relative gratification would be salient and we assumed an increase in prejudice too.
Finally, for the condition Equality Stable it was assumed that there would be no difference in the degree of discrimination between this condition and the control condition. The results confirmed that the effect of Equality Decreasing and Equality Increasing impacting ingroup bias. That is to say, participants who were made to believe that the ingroup’s and the outgroup’s job opportunities will either equally drop or rise showed significant more prejudice compared the control group. In respect to the effect of Equality Stable, the proposed hypothesis could not be confirmed, since participants showed more ingroup bias than those in the control group. These results indicate that the link between equality and prejudice is less straightforward than Guimond and Dambrun (2002) suggested.

**GENERAL DISCUSSION**

The overall aim of the three experiments presented in this paper was to replicate the findings of Guimond and Dambrun’s (2002) experiments, that relative deprivation and relative gratification, both, increase prejudice. Further, the experiments aimed to confirm their suggestion that equality will reduce prejudice.

In the three experiments it has been demonstrated that relative deprivation is a stable predictor for prejudice. Even though, the effect of relative deprivation on prejudice was only statistically significant in the first and third experiment, the results in the second experiment did point in the expected direction. These results, therefore, confirm the results of previous studies, that relative deprivation is a key variable in the prediction of prejudice (see Guimond & Dambrun, 2002; Walker & Smith, 2002, Grosman & Muller, 1973; Dube & Guimond, 1983; Pettigrew & Meertens, 1995; Pettigrew et al., 1998).
Relative gratification, as a second main predictor tested in the three experiments, revealed to be an even more consistent predictor in relation to significantly increasing prejudice when compared to the control group. These findings confirm those of Guimond and Dambrun (2002) and verify the V-curve as proposed by Grofmann and Muller (1973). The results of the present three experiments provide evidence of the robustness of this phenomenon and support Guimond and Dumrun’s (2002, p. 909) conclusion that “RG is one of the central variables in inter-group relations and an important cause of prejudice and discrimination, as important if not more important than RD”.

Although, empirical evidence of the relationship between relative gratification and prejudice exists the understanding of the underlying psychological processes is still at its beginning. Guimond and Dambrun (2002) tested two psychological approaches which support the assumed positive relationship between relative gratification and increased prejudice: first, the approach by Bodenhausen, Kramer, and Süsser (1994) addressing the interrelation between positive or happy mood and the increased use of heuristic processing strategies (such as stereotypes); and secondly, the approach by Sidanius and Pratto (1999) on social dominance which suggests that stereotyping and prejudice as cognitive products serve to legitimate social inequality. As reported elsewhere Guimond and Dambrun (2002) did not find any empirical support for the two proposed approaches. As a consequence to their findings Guimond and Dambrun (2002, p. 910) suggest the possibility to link relative gratification with the approach of social identity theory (Tajfel & Turner, 1986, 2001). In accordance to Bettencourt, Dorr, Charlton and Hume (2001) the two authors state that high-status groups are more biased, and
therefore more discriminatory, than low-status groups. Guimond and Dambrun (2002) argue that the concept of high status can be equated with that of relative gratification, as both reflect a favourable position on some dimension of comparison. They further argue that relative gratification should then increase prejudice rather than decrease it.

In terms of equality, the present study could not confirm Guimond and Dambrun’s (2002) optimistic view that equality may reduce intergroup discrimination. Equality revealed to be a problematic variable due to the way in which equality was conceptualized and operationalized and therefore, it may be useful to first discuss some of the methodological limitations attached to our studies before attempting to find explanations why equality does not reduce prejudice.

First, the manipulations used for the relative deprivation condition and the relative gratification condition may seem straightforward. However, the manipulations proved to be more complicated with the equality condition. The critical review of the manipulation of the equality condition in the first two experiments indicated the possibility for ambiguity, that is to say, since equality was manipulated as “equal improvement” the possibility was given that participants processed the information (manipulation) as either equality or improvement. The latter would have the consequence that relative gratification was indirectly manipulated. Even though the third experiment tried to control for this, the results revealed that equality did not reduce prejudice.
The second limitation refers to the manipulation checks applied. There were inconsistent results of the manipulation checks in particular referring to the equality manipulations. The weaknesses were the measures used to assess the manipulations as they may not have been appropriate. Even though these methodological limitations are important to be considered, the results in all three of the experiments did point in the same direction, that equality does not reduce prejudice. The latter suggests that we are dealing not only with a methodological issue but even more with an issue related to the theoretical concept of ‘equality’.

Our findings relating to equality begs the question: Why do we assume that equality reduces prejudice? For instance, if we take existing theoretical approaches into consideration one would not assume that equality reduces prejudice as suggested by Guimond and Dambrun (2002). In an attempt to explain our findings, that equality does not necessarily reduce prejudice, we will make use of two theoretical approaches: Social Dominance Theory and Social Identity Theory.

Social dominance theory is largely based on the assumption that social systems are subject to the influences of two forces: the hierarchy-enhancing forces which produce and maintain high levels of group based social inequality and hierarchy-attenuating forces which produce greater levels of group based social equality (Sidanius & Pratto, 1999, p. 38). Social Dominance Orientation (i.e. SDO) as a measure to assess people’s orientation toward group dominance (than toward equality) is defined as “a person’s general value for group dominance and group inequality” (Sidanius & Pratto, 1999, p. 71). Social dominance theory, with particular regard to SDO, would expect that people from dominant groups (i.e.
dominants) would show higher levels of SDO than people from subordinate groups (i.e.
subordinates). A reason is that people’s general desire for positive self-esteem is compatible
with hierarchy-legitimizing myths for dominants, therefore, making group superiority seem
appropriate for them (Sidanius & Pratto, 1999, p. 77). It is generally accepted that dominants
are treated better than subordinates, therefore allowing them to feel more comfort in the
context of group inequality. Sidanius and Pratto (1999, p. 77) posit that societies often define
social standards according to ways which benefit the dominants, as they are often seen as
‘better’, thus affirming the ‘rightness’ of inequality in the dominants’ minds. SDO represents
the support for group dominance, thus those scoring high on SDO should prefer social
ideologies that enhance group inequality (Sidanius & Pratto, 1999, p. 84). Ideologies chosen
by the dominants are those which favour group inequalities, such as social segregation. In
attempting to find an explanation for the results indicating that equality does not reduce
prejudice from the perspective of social dominance theory one could state the following:
Social dominance theory would postulate that people scoring high on SDO would reject the
concept of equality and make use of legitimizing myths in order to maintain the status quo.
Social dominance theory would further argue that those participants in the equality stable
condition who perceived themselves to be in a dominant status group were prejudiced not
because of the perceived equality, but rather because they rejected the concept of equality
altogether in favour of legitimizing myths that enhance group inequality.

From the perspective of Social Identity Theory (Tajfel & Turner, 1986, 2001) one would
suggest that participants faced with the condition of equality sought to be positively distinct
and, therefore their levels of prejudice increased. Tajfel and Turner (1986, 2001, p. 101)
argue that social categorization is not merely a stratification tool but also provides a system of orientation for self-reference, as it creates and defines the individual’s place within society, and a sense of identity. Social identity consists of aspects of the individual’s self-image derived from the social categories to which one belongs. “These identifications are to a very large extent relational and comparative: they define the individual as similar to or different from, as “better” or “worse” than, members of other groups” (Tajfel & Turner, 1986, 2001, p.101). The general assumptions posit first that individuals strive to maintain their positive self-concept. Secondly, that social groups are associated with positive and negative value connotations, thus, social identity may be positive or negative. Finally, that individuals determine the value of one’s own group through social comparisons with relevant other groups. Social identity theory assumes, therefore, that individuals strive to be positively distinct from relevant outgroups; and that when social identity is unsatisfactory, individuals will strive to either leave their group for a more positively distinct group, or strive to make their group more positively distinct (Tajfel & Turner, 1986, 2001, p.101). Social identity theory proposes two main strategies to make the ingroup positively distinct: creativity strategies (under the conditions that the intergroup relations are perceived as secure) and competitive strategies (under the conditions that the intergroup relations are perceived as insecure). One could assume that participants in the experiments perceived the intergroup relations as secure due to the information provided about future job opportunities. Consequently, one could assume that participants in the Equality Stable condition were likely to apply creativity strategies to become positively distinct from the comparison outgroup. Tajfel and Turner (1986, 2001, p.107) hypothesize that when a group strives for positive distinctiveness but is hampered, frustrated or impeded in any way by the outgroup; more
overt conflict and hostility will be promoted between the two groups. Further, one could speculate that those participants in the Equality Stable condition may have perceived that they could strive for positive distinctiveness (by applying creativity strategies), but may have anticipated that the intergroup situation would hinder the successful application of creativity strategies, and therefore, may have led to an increase in prejudice toward the outgroup.

As outlined above both, social dominance theory and social identity theory, would question the proposal of Guimond and Dambrun (2002) that equality would reduce prejudice. A main result of the present study is therefore that future studies place more emphasis on the concept of equality.

Although, the present study was based on the theory-testing approach, the results might provide interesting information attempting to extend our understanding about social conflicts such as the 2008 xenophobic attacks on immigrants in South Africa. On May 12, 2008 locals of the township of Alexandria started to attack migrants from other African countries. These attacks spread in the following weeks to other settlements throughout the country. In total, 62 people were killed, 21 being South African citizens. Although, one-third of the victims were South Africans, the attacks were motivated by xenophobia.

The Human Science Research Council (2008) identified three broad causes for the violence: first, relative deprivation, secondly, South African exceptionalism (or a feeling of superiority in relation to other Africans); and finally, exclusive citizenship (a form of nationalism that excludes others). The first two causes will be discussed in relation to the findings of the present study.
The present study provides evidence in support of the first cause as suggested by the Human Science Research Council. *Relative deprivation* – as shown in our three experiments – revealed to be a strong predictor for prejudice when tested within the job opportunity context. Interestingly, perpetrators and/or political analysts used the argument of intense competitions for jobs as a main explanation for the violent attacks.

The results of the present study might also provide a different perspective on the cause “South African exceptionalism” in that it may be related to the phenomenon of relative gratification. *South African exceptionalism* is explained by the historical relationship – mainly shaped by its colonial and apartheid history – South Africans have with other African countries. It is believed that this historical relationship led to a South African superiority complex, uniting black and white South Africans against other Africans. The concept of relative gratification would add a perspective that takes the present situation into consideration, which South Africans might experience in relation to other Africans. One could hypothesize that South Africans experience relative gratification in terms of economic developments in relation to other African countries. Labels such as “South Africa is the economic powerhouse of Africa” might contribute to the South African superiority complex. As the findings of previous and the present study showed, people who experience relative gratification (i.e. economic superiority) are likely to show hostile attitudes toward immigrants. Empirical evidence for this hypothesis has already been provided for the South African context by Dambrun et al. (2006).
REFERENCES


APPENDIX A: MANIPULATIONS OF EXPERIMENT 1

Relative Deprivation condition

A recent survey on mental wellbeing conducted by the “Mental health and functional disorders” research team of the Medical Research Council of South Africa (MRC) indicated there is an alarming increase in the number of South Africans suffering from mental issues such as depression, anxiety, alcohol and substance abuse, psychotic disorders, and relational problems. The results were immediately reported to the Department of Health. Sunday Times Newspaper, 06 May 2007, reported that Professor Bowen stated: “The figures are not only alarming. Let me be frank, the figures are terrifying”. It further reported him saying, “It is crunch time, there is no time to waste. The recommendation of the Medical Research Council of South Africa is to merge all resources on the training and employment of economists in various societal areas. Economists are the only professionals trained to deal with and to overcome the expected economic catastrophe, as a result of deteriorating mental health, efficiently. I might repeat myself, but the situation is severe and we do not have much time for long debates.” The Department of Health promptly initiated talks with other Departments such as Education and the Department of Finance and Economic Affairs. The Sunday Times interviewed the Health Department’s spokesperson and reported that the Department of Health, Department of Economics and Department of Higher Education agreed that the number of Economists in training and the number of Economists employed by the Public Sector will more than double from 8000 today to 19000 in four year time. Experts expect within the next four years an increase in job opportunities for Economists which will outshine the increase of job opportunities for Psychologists in the last ten years. According to the Sunday Times one of the experts concluded: “The demand for economics graduates will greatly exceed the demand for psychology graduates”.
Relative Gratification condition

A recent survey on mental wellbeing conducted by the “Mental health and functional disorders” research team of the Medical Research Council of South Africa (MRC) indicated there is an alarming increase in the number of South Africans suffering from mental issues such as depression, anxiety, alcohol and substance abuse, psychotic disorders, and relational problems. The results were immediately reported to the Department of Health. The Sunday Times Newspaper, 06 May 2007, reported that Professor Bowen stated: “The figures are not only alarming. Let me be frank, the figures are terrifying”. It further reported him saying, “It is crunch time, there is no time to waste. The recommendation of the Medical Research Council of South Africa is to merge all resources on the training and employment of Psychologists in various societal areas such as schools, hospitals, police stations, community centers and churches. Psychologists are the only professionals trained to help people to deal with and overcome mental issues efficiently. I might repeat myself, but the situation is severe and we do not have much time for long debates.”

The Department of Health promptly initiated talks with other Departments such as Education and the Department of Finance and Economic Affairs. The Sunday Times interviewed the Health Department’s spokesperson and reported that the Department of Health, Department of Economics and Department of Higher Education agreed that the number of Psychologists in training and the number of Psychologists employed by the Public Sector will more than double from 8000 today to 19000 in four year time. Experts expect within the next four years an increase in job opportunities for Psychologists which will outshine the increase of job opportunities for Economists in the last ten years. According to the Sunday Times one of the experts concluded: “The demand for psychology graduates will greatly exceed the demand for economics graduates”.

Equality Condition

A recent survey on mental wellbeing conducted by the “Mental health and functional disorders” research team of the Medical Research Council of South Africa (MRC) indicated there is an alarming increase in the number of South Africans suffering from mental issues such as depression, anxiety, alcohol and substance abuse, psychotic disorders, and relational problems. The results were immediately reported to the Department of Health. Sunday Times Newspaper, 06 May 2007, reported that Professor Bowen stated: “The figures are not only alarming. Let me be frank, the figures are terrifying”. It further reported him saying, “It is crunch time, not much time to waste. The recommendation of the Medical Research Council of South Africa is to merge all resources on the training and employment of psychologists and economists in various societal areas. Psychologists and Economists are the only professionals trained to deal with and overcome the expected catastrophe, as a result of deteriorating mental health, efficiently. I might repeat myself, but the situation is severe and we do not have much time for long debates.” The Department of Health promptly initiated talks with other Departments such as Education and the Department of Finance and Economic Affairs. The Sunday Times interviewed the Health Department’s spokesperson and reported that the Department of Health, Department of Economics and Department of Higher Education agreed that the number of Psychologists and Economists in training and the number of Psychologists and Economists employed by the Public Sector will more than double in four year time. Experts expect within the next four years an increase in job opportunities for Psychologists and Economists which will outshine any increase of job opportunities in both sectors within the last ten years. According to the Sunday Times one of the experts concluded: “The demand for psychology graduates will be equal to the demand for economics graduates”.
APPENDIX B: MEASUREMENTS IN EXPERIMENT 1

Generalized Prejudice

1. The diversity brought in by foreigners is enriching to South Africa.
2. South Africans should have priority with regards to employment.
3. More rights must be given to immigrants. (-)
4. South Africans should have priority with regards to social benefits.
5. Immigrant families entering South Africa should be more strictly limited.
6. South Africans should have priority with regards to housing.
7. I would not be worried if most of my university friends had foreign origins.
8. South African nationality should not be granted so easily.
9. The wearing of cultural attire at school should be legalized.
10. It is irrational to blame immigrants for South Africa’s economic problems. (-)
11. I can easily understand the anger felt by the immigrants in South Africa. (-)
12. Foreigners living in South Africa should be allowed to vote. (-)
13. If there is a lot of unemployment in South Africa, it is because immigrants take South Africans’ job.
14. I consider that South Africa is unjust towards immigrants. (-)
Ethnocentrism

1. People in cultures outside of South Africa have a better lifestyle than we have.
2. I respect the values and customs of other countries.
3. South Africa should try to be more like other countries.
4. *Lifestyles in other countries are not as valid as those in South Africa.*
5. Most South Africans just do not know what is good for them.
6. South Africans act strange and unusual when they go to other countries.
7. *South Africans have just about the best lifestyles of anywhere.*
8. South Africa is a poor model for other countries.
9. *Most people would be happier if they lived like South Africans.*
10. It is not wise for other countries to look up to South Africa.
11. *Most other countries are backward compared to South Africa.*
12. *SA should be the role model for other countries.*
13. Lifestyles in other countries are just as valid as those in South Africa.
14. *Other countries should try to be more like South Africa.*
15. I am not interested in the values and customs of other countries.
16. South Africans could learn a lot from people in other countries.
17. *Most people in other countries just do not know what is good for them.*
18. *People in other countries could learn a lot from South Africans.*
19. I have little respect for the values and customs of other countries.
20. South Africa is backward compared to most other countries.
21. I am very interested in the values and customs of other countries.
22. *Other countries are smart to look up to South Africa.*
23. *People from other countries act strange and unusual when they come into South Africa.*
24. Most people would be happier if they did not live like South Africans.
Behavioral Intention

1. Tell friends and neighbours that this is a good law.
2. Tell the police about known illegal immigrants.
3. Help the police in the identification of illegal immigrants
4. Approve the use of force to deal with difficult illegal immigrants.
5. Approve the application of strict criminal penalty for all those refusing to comply with the law.
APPENDIX C: MANIPULATION OF EXPERIMENT 2

Relative Deprivation condition

*Daily Dispatch, 30th May, 2007*

Dr Udesh Pillay, Executive Director of Urban, Rural and Economic Development (URED), stated in a media brief, early this year, that the main advantage to South Africa’s hosting of the 2010 soccer World Cup, would be in the form of economic and employment benefits. Economic growth and job creation is surely set to rise substantially, and provincial governments are well on their way with strategic plans to ensure the success of not only this spectacular event, but a spiralling economic growth, which will start before the event and continue in the aftermath. In preparation for this historic occasion, parliament has decided to invest R5 billion towards the upliftment of the Eastern Cape.

Premier of the Eastern Cape, Nosimo Balindlela, in her 2007 budget speech addressed the issue of the 2010 budget of R5 billion for the Eastern Cape. She took the public by surprise with her shock announcement that Port Elizabeth had been allocated R3 billion for upgrading the city. This substantial amount is more than double the amount of R1.3 billion that has been allocated to East London. In anticipation of the increasing demand for employment in Port Elizabeth, the Nelson Mandela Metropolitan University (formerly known as University of Port Elizabeth) and the Provincial Department of the Urban, Rural and Economic Development (URED), immediately signed an agreement. This agreement states that Nelson Mandela Metropolitan University students, studying in the fields of commerce, social science, engineering, education, law, health and tourism, will be given first preference for employment in the next 4 to 6 years. Whilst prospects are looking very good for Port Elizabeth university graduates with the increase in job opportunities, it is estimated that graduates from East London will experience a severe decrease in employment prospects.
Relative Gratification condition

*Daily Dispatch, 30th May, 2007*

Dr Udesh Pillay, Executive Director of Urban, Rural and Economic Development (URED), stated in a media brief, early this year, that the main advantage to South Africa’s hosting of the 2010 soccer World Cup, would be in the form of economic and employment benefits. Economic growth and job creation is surely set to rise substantially, and provincial governments are well on their way with strategic plans to ensure the success of not only this spectacular event, but a spiralling economic growth, which will start before the event and continue in the aftermath. In preparation for this historic occasion, parliament has decided to invest R5 billion towards the upliftment of the Eastern Cape.

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Equality Condition

*Daily Dispatch, 30th May, 2007*

Dr Udesh Pillay, Executive Director of Urban, Rural and Economic Development (URED), stated in a media brief, early this year, that the main advantage to South Africa’s hosting of the 2010 World Cup, would be in the form of economic and employment benefits. Economic growth and job creation is surely set to rise substantially, and provincial governments are well on their way with strategic plans to ensure the success of not only this spectacular event, but a spiralling economic growth, which will start before the event and continue in the aftermath. In preparation for this historic occasion, parliament has decided to invest R5 billion towards the upliftment of the Eastern Cape.

Premier of the Eastern Cape, Nosimo Balindlela, in her 2007 budget speech addressed the issue of the 2010 budget of R5 billion for the Eastern Cape. She took the public by surprise with her shock announcement that both East London and Port Elizabeth had been allocated R1.5 billion each for upgrading the two cities. In anticipation of the increasing demand for employment in East London and Port Elizabeth, the East London campus of the University of Fort Hare and the Nelson Mandela Metropolitan University (formerly known as University of Port Elizabeth) immediately signed an agreement with the Provincial Department of the Urban, Rural and Economic Development (URED). This agreement states that Fort Hare students and the Nelson Mandela Metropolitan University students, studying in the fields of commerce, social science, engineering, education, law, health and tourism, will be given first preference for employment in the next 4 to 6 years. So prospects are looking very good for East London and Port Elizabeth graduates with the increase in job opportunities and it is estimated that job opportunities will increase on an equal level in both cities.
APPENDIX D: MEASUREMENTS IN EXPERIMENT 2

Generalized Prejudice

1. The diversity brought in by foreigners is enriching to South Africa.
2. *South Africans should have priority with regards to employment.*
3. More rights must be given to immigrants. (-)
4. *South Africans should have priority with regards to social benefits.*
5. *Immigrant families entering South Africa should be more strictly limited.*
6. *South Africans should have priority with regards to housing.*
7. I would not be worried if most of my university friends had foreign origins.
8. South African nationality should not be granted so easily.
9. The wearing of cultural attire at school should be legalized.
10. It is irrational to blame immigrants for South Africa’s economic problems. (-)
11. I can easily understand the anger felt by the immigrants in South Africa. (-)
12. Foreigners living in South Africa should be allowed to vote. (-)
13. If there is a lot of unemployment in South Africa, it is because immigrants take South Africans’ job.
14. I consider that South Africa is unjust towards immigrants. (-)
Ethnocentrism

1. People in cultures outside of South Africa have a better lifestyle than we have.
2. *I respect the values and customs of other countries.*
3. *South Africa should try to be more like other countries.*
4. *Lifestyles in other countries are not as valid as those in South Africa.*
5. Most South Africans just do not know what is good for them.
6. South Africans act strange and unusual when they go to other countries.
7. *South Africans have just about the best lifestyles of anywhere.*
8. South Africa is a poor model for other countries.
9. *Most people would be happier if they lived like South Africans.*
10. It is not wise for other countries to look up to South Africa.
11. *Most other countries are backward compared to South Africa.*
12. SA should be the role model for other countries.
13. Lifestyles in other countries are just as valid as those in South Africa.
14. *Other countries should try to be more like South Africa.*
15. I am not interested in the values and customs of other countries.
16. South Africans could learn a lot from people in other countries.
17. *Most people in other countries just do not know what is good for them.*
18. *People in other countries could learn a lot from South Africans.*
19. I have little respect for the values and customs of other countries.
20. South Africa is backward compared to most other countries.
21. I am very interested in the values and customs of other countries.
22. *Other countries are smart to look up to South Africa.*
23. People from other countries act strange and unusual when they come into South Africa.
24. Most people would be happier if they did not live like South Africans.
Behavioral Intention

1. Tell friends and neighbours that this is a good law.
2. Tell the police about known illegal immigrants.
3. Help the police in the identification of illegal immigrants
4. Approve the use of force to deal with difficult illegal immigrants.
5. Approve the application of strict criminal penalty for all those refusing to comply with the law.
APPENDIX E: MANIPULATIONS OF EXPERIMENT 3

Relative Deprivation

A recent survey on mental wellbeing conducted by the “Mental health and functional disorders” research team of the Medical Research Council of South Africa (MRC) indicated there is an alarming increase in the number of South Africans suffering from mental issues such as depression, anxiety, alcohol and substance abuse, and relational problems as a consequence of the economic problems in South Africa. These results will impact the demand for university graduates in the next few years. The results were immediately reported to the Department of Health. Sunday Times Newspaper, 06 May 2007, reported that Professor Bowen stated: “The figures are not only alarming. Let me be frank, the figures are terrifying”. It further reported him saying, “It is crunch time, there is no time to waste. Therefore, the recommendation is to merge all resources on the training and employment of Bachelor of Commerce graduates in various societal areas in order to, firstly, address the economic situation. Commerce graduates are the only professionals trained to deal with and to overcome the expected economic catastrophe, as a result of deteriorating mental health, efficiently. I might repeat myself, but the situation is severe and we do not have much time for long debates.” The Department of Health promptly initiated talks with other Departments such as Education and the Department of Finance and Economic Affairs. The Sunday Times interviewed the Health Department’s spokesperson and reported that the Department of Health, Department of Economic Affairs and Department of Higher Education agreed that the number of Bachelor of Commerce graduates in training and the number of Bachelor of Commerce graduates employed by the Public Sector will more than double from 8000 today to 19000 in four year time. Experts expect within the next four years an increase in job opportunities for Bachelor of Commerce graduates which will outshine the increase of job opportunities for Bachelor of Social Science graduates in the last ten years. According to the Sunday Times one of the experts concluded: “Since the economic problems were identifies as the reason for the mental issues of South Africans, the demand for Bachelor of Commerce graduates will greatly exceed the demand for Bachelor of Social Science graduates, in order to alleviate these issues”.
Relative Gratification

A recent survey on mental wellbeing conducted by the “Mental health and functional disorders” research team of the Medical Research Council of South Africa (MRC) indicated there is an alarming increase in the number of South Africans suffering from mental issues such as depression, anxiety, alcohol and substance abuse, and relational problems as a reason for the economic problems in South Africa. These results will impact the demand for university graduates in the next few years. The results were immediately reported to the Department of Health. The Sunday Times Newspaper, 06 May 2007, reported that Professor Bowen stated: “The figures are not only alarming. Let me be frank, the figures are terrifying”. It further reported him saying, “It is crunch time, there is no time to waste. Therefore the recommendation is to merge all resources on the training and employment of Bachelor of Social Science graduates in various societal areas such as schools, hospitals, police stations, community centers and churches, in order to, firstly, address the social issues. Social Science graduates are the only professionals trained to help people to deal with and overcome mental issues efficiently. I might repeat myself, but the situation is severe and we do not have much time for long debates.” The Department of Health promptly initiated talks with other Departments such as Education and the Department of Finance and Economic Affairs. The Sunday Times interviewed the Health Department’s spokesperson and reported that the Department of Health, Department of Economic Affairs and Department of Higher Education agreed that the number of Bachelor of Social Science graduates in training and the number of Bachelor of Social Science graduates employed by the Public Sector will more than double from 8000 today to 19000 in four year time. Experts expect within the next four years an increase in job opportunities for Bachelor of Social Science graduates which will outshine the increase of job opportunities for Bachelor of Commerce graduates in the last ten years. According to the Sunday Times one of the experts concluded: “Since the mental wellbeing was identified as the reason for the economic problems in South Africa, the demand for Bachelor of Social Science graduates will greatly exceed the demand for Bachelor of Commerce graduates, in order to alleviate these problems”.
Equality Decreasing Condition

A recent survey on mental wellbeing conducted by the “Mental health and functional disorders” research team of the Medical Research Council of South Africa (MRC) indicated there is a substantial decrease in the number of South Africans suffering from mental issues such as depression, anxiety, alcohol and substance abuse, and relational problems. This decrease in mental problems is directly associated with the improvement of the economic situation in South Africa. The results were reported to the Department of Health. Sunday Times Newspaper, 06 May 2007, reported that Professor Bowen stated: “The decrease of mental issues of South Africans is seen as a result of the growing economy. South Africans seem to be coping with their lives and economic stressors as a result of greater earning potential seen in the country.” It further reported him saying, “This will have a great impact on graduates in the following years. It is expected that Bachelor of Commerce and Bachelor of Social Science graduates are in a lesser demand.” The Sunday Times interviewed the Health Department’s spokesperson and reported that the Department of Health, Department of Economic Affairs and Department of Higher Education agreed that the number of Bachelor of Social Science graduates and Bachelor of Commerce graduates in training and the number of Bachelor of Social Science graduates and Bachelor of Commerce graduates employed by the Public Sector will dramatically decrease in four years time. Consequently, experts expect within the next four years a decrease in job opportunities for Bachelor of Social Science graduates and Bachelor of Commerce graduates equally. According to the Sunday Times one of the experts concluded: “Bachelor of Social Science graduates and Bachelor of Commerce graduates will be in equally less demand than any other graduates”.

A recent survey on mental wellbeing conducted by the “Mental health and functional disorders” research team of the Medical Research Council of South Africa (MRC) indicated there is an alarming increase in the number of South Africans suffering from mental issues such as depression, anxiety, alcohol and substance abuse, and relational problems. These mental issues are directly related to the economic downfall in South Africa. The results were immediately reported to the Department of Health. Sunday Times Newspaper, 06 May 2007, reported that Professor Bowen stated: “The figures are not only alarming. Let me be frank, the figures are terrifying”. It further reported him saying, “It is crunch time, not much time to waste. Therefore, the recommendation is to merge all resources on the training and employment of Bachelor of Social Science graduates and Bachelor of Commerce graduates in various societal areas. Social Science graduates and Commerce graduates are the only professionals trained to deal with and overcome the expected catastrophe, efficiently. I might repeat myself, but the situation is severe and we do not have much time for long debates.”

The Department of Health promptly initiated talks with other Departments such as Education and the Department of Finance and Economic Affairs. The Sunday Times interviewed the Health Department’s spokesperson and reported that the Department of Health, Department of Economic Affairs and Department of Higher Education agreed that the number of Bachelor of Social Science graduates and Bachelor of Commerce graduates in training and the number of Bachelor of Social Science graduates and Bachelor of Commerce graduates employed by the Public Sector, both, will more than double in four year time. Consequently, experts expect within the next four years, an equal increase in job opportunities for Bachelor of Social Science graduates and Bachelor of Commerce graduates. According to the Sunday Times one of the experts concluded: “Bachelor of Social Science graduates and Bachelor of Commerce graduates will be in equal demand in the next four years”.

Equality Stable Condition

A recent survey on mental wellbeing conducted by the “Mental health and functional disorders” research team of the Medical Research Council of South Africa (MRC) indicated the number of South Africans suffering from mental issues such as depression, anxiety, alcohol and substance abuse, and relational problems has stabilized in the last five years. The stability in mental wellbeing of South Africans is directly related with the economic stability in South Africa and is seen as an outcome of an appropriate number of Bachelor of Social Science and Bachelor of Commerce graduates. The results were reported to the Department of Health. Sunday Times Newspaper, 06 May 2007, reported that Professor Bowen stated: “The figures have stabilized, and we are hoping to keep these mental health figures as stable as possible”. It further reported him saying, “the stabilization of South African mental wellbeing can be seen as a result of economic improvement. South Africans have learnt how to deal with economic stressors and it has resulted in a stabilization, rather than an increasing number, of mental health issues. Therefore, the recommendation is to keep the numbers of Bachelor of Social Science and Bachelor of Commerce graduates constant for the next four years.” The Department of Health promptly initiated talks with other Departments such as Education and the Department of Finance and Economic Affairs. The Sunday Times interviewed the Health Department’s spokesperson and reported that the Department of Health, Department of Economic Affairs and Department of Higher Education agreed that the number of Bachelor of Social Science graduates and Bachelor of Commerce graduates in training and the number of Bachelor of Social Science graduates and Bachelor of Commerce graduates employed by the Public Sector will both remain constant over the next four years. Consequently, experts expect within the next four years no changes in the job opportunities for Bachelor of Social Science graduates and Bachelor of Commerce graduates. According to the Sunday Times one of the experts concluded: “The demand for Bachelor of Social Science and Bachelor of Commerce graduates will be equal and remain constant over the next four years”.

APPENDIX F: MEASURMENTS IN EXPERIMENT 3

Generalized Prejudice

1. The diversity brought in by foreigners is enriching to South Africa.
2. South Africans should have priority with regards to employment.
3. More rights must be given to immigrants. (-)
4. South Africans should have priority with regards to social benefits.
5. Immigrant families entering South Africa should be more strictly limited.
6. South Africans should have priority with regards to housing.
7. I would not be worried if most of my university friends had foreign origins.
8. South African nationality should not be granted so easily.
9. The wearing of cultural attire at school should be legalized.
10. It is irrational to blame immigrants for South Africa’s economic problems. (-)
11. I can easily understand the anger felt by the immigrants in South Africa. (-)
12. Foreigners living in South Africa should be allowed to vote. (-)
13. If there is a lot of unemployment in South Africa, it is because immigrants take South Africans’ job.
14. I consider that South Africa is unjust towards immigrants. (-)
Ethnocentrism

1. People in cultures outside of South Africa have a better lifestyle than we have.
2. I respect the values and customs of other countries.
3. South Africa should try to be more like other countries.
4. *Lifestyles in other countries are not as valid as those in South Africa.*
5. Most South Africans just do not know what is good for them.
6. South Africans act strange and unusual when they go to other countries.
7. South Africans have just about the best lifestyles of anywhere.
8. South Africa is a poor model for other countries.
9. *Most people would be happier if they lived like South Africans.*
10. It is not wise for other countries to look up to South Africa.
11. *Most other countries are backward compared to South Africa.*
12. *SA should be the role model for other countries.*
13. Lifestyles in other countries are just as valid as those in South Africa.
14. *Other countries should try to be more like South Africa.*
15. I am not interested in the values and customs of other countries.
16. South Africans could learn a lot from people in other countries.
17. *Most people in other countries just do not know what is good for them.*
18. People in other countries could learn a lot from South Africans.
19. *I have little respect for the values and customs of other countries.*
20. South Africa is backward compared to most other countries.
21. I am very interested in the values and customs of other countries.
22. *Other countries are smart to look up to South Africa.*
23. *People from other countries act strange and unusual when they come into South Africa.*
24. Most people would be happier if they did not live like South Africans.
Behavioral Intention

1. Tell friends and neighbours that this is a good law.
2. Tell the police about known illegal immigrants.
3. Help the police in the identification of illegal immigrants
4. Approve the use of force to deal with difficult illegal immigrants.
5. Approve the application of strict criminal penalty for all those refusing to comply with the law.